

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently Amended) A method of reducing bandwidth utilization while providing information to a client from a client access network in the form of user information regarding a ~~plurality~~ set of users, said method comprising the following steps:

[[(-)] receiving in an information delivery server, a subscription request from the client for certain information on [[a]] the set of users[[,]];

[[(-)] receiving and storing by the server, information updates regarding users in the set[[,]];

[[(-)] receiving by the server, a ~~subsequent~~ first request for user information from the client[[,]];

[[(-)] retrieving by the server, stored user information corresponding to the requested user information,~~and~~;

[[(-)] sending a first notification from the server to the client regarding, the first notification including the retrieved user information, in response to the ~~subsequent~~ first user information request;

receiving by the server, a subsequent request for user information from the client;
and

sending a subsequent notification from the server to the client, the subsequent notification including only changes in the user information since the first notification, in response to the subsequent user information request.

2. (Previously Presented) The method according to claim 1, wherein the users are mobile users.

3. (Previously Presented) The method according to claim 1, wherein the user information is presence information on the users.

4. (Previously Presented) The method according to claim 1, wherein at least some of the users in the set are connected to other access networks, wherein the client access network establishes a network subscription for user information updates with each of the other access networks to which users in the set are connected, in response to the received client subscription request.

5. (Previously Presented) The method according to claim 4, wherein several of the users in the set are connected to the same user access network, wherein the client access network sends one common subscription request for those users to that user access network, including a list of the users in the set being connected to that network.

6. (Previously Presented) The method according to claim 4, wherein information updates are continuously received from the other access networks whenever changes of state are detected for the users in the set, impacting the present network subscription.

7. (Previously Presented) The method according to claim 4, wherein, after establishing the network subscriptions, information is initially received from the other access networks on the current states of their respective users.

8. (Currently Amended) The method according to claim 7, wherein an initial notification is sent to the client regarding the received user information, before receiving the subsequent first user information request.

9. (Currently Amended) The method according to claim 1, wherein the subsequent first request for user information received from the client is limited to a subset of users comprising fewer users than the ~~original~~ set of users.

10. (Currently Amended) The method according to claim 1, wherein the subsequent first request for user information received from the client ~~is limited to one or some requests fewer~~ types of information ~~[[of]]~~ than the information included in the subscription.

11. (Currently Amended) The method according to claim 9, wherein the first request for user information received from the client is limited to a subset of users and/or or types of information ~~[[is]]~~ selected by the client.

12. (Currently Amended) The method according to ~~claim 9~~ claim 11, wherein the subset of users ~~and/or or~~ types of information is adapted to a service ~~and/or or~~ application currently ~~utilised~~ utilized by the client.

13. (Canceled)

14. (Currently Amended) The method according to claim 1, wherein, when the user information has not changed between the first notification and the subsequent request for user information, the [[a]] subsequent notification is sent to the client indicating that nothing has with only an indication that the user information has not changed since the last notification.

15. (Currently Amended) The method according to claim 1, wherein the subscription request from the client indicates the types of information ~~needed~~ requested.

16. (Currently Amended) The method according to claim 1, wherein the subscription request from the client indicates a time of expiration for the subscription.

17. (Previously Presented) The method according to claim 16, wherein the subscription request from the client specifies a minimum time between successive notifications corresponding to the time of expiration.

18. (Previously Presented) The method according to claim 1, wherein the set of users is selected by indicating a predetermined list of users.

19. (Previously Presented) The method according to claim 1, wherein the set of users is selected as an ad hoc list of users.

20. (Previously Presented) The method according to claim 1, wherein the set of users is selected by adding users to or deleting users from a predetermined list of users.

21. (Currently Amended) An arrangement in a client access network for reducing bandwidth utilization while providing information to a connected client in the form of information regarding a ~~plurality~~ set of users, said arrangement comprising:

[[~~-~~]] an information delivery server ~~adapted to receive~~ for receiving a subscription request from the client for certain information on ~~[[a]] the~~ set of users, ~~and to receive~~ for receiving information updates regarding the set of users from their respective access networks, for receiving requests for user information from the client, and for sending notifications including requested user information to the client in response to the user information requests; and

[[~~-~~]] a data storage means in communication with the information delivery server for storing updated user information~~[[.]]~~;

wherein, when a request for user information is received from the client, the information delivery server is further adapted to receive a subsequent request for user information from the client, and to retrieve retrieves the requested user information from the data storage means and ~~send~~ sends a notification to the client including ~~the retrieved user information~~ only changes in the user information since a previous notification, in response to the user information request.

22. (Currently Amended) The arrangement according to claim 21, wherein at least some of the users in the set are connected to other access networks, wherein the information delivery server is ~~further adapted~~ configured to establish a network subscription for user information updates with each of the other access networks to which users in the set are connected, in response to the received client subscription request.

23. (Currently Amended) The arrangement according to claim 21, wherein the information delivery server is ~~further adapted~~ configured to continuously receive information updates from the other access networks whenever changes of state are detected for the users in the set.

24. (Currently Amended) The arrangement according to claim 21, wherein the information delivery server is ~~further adapted~~ configured to initially receive from the other networks information on the current states of their respective users.

25. (Currently Amended) The arrangement according to claim 24, wherein the information delivery server is ~~further adapted~~ configured to send an initial notification to the client containing the received user information.

26. (Canceled)

27. (Currently Amended) The arrangement according to claim 21, wherein the information delivery server is ~~further adapted~~ configured to detect that the user information has not changed between the first notification and the subsequent request for user information, and in response, to send to the client [[a]] the subsequent notification indicating that nothing has with only an indication that the user information has not changed since the last notification.

28. (Currently Amended) The arrangement according to claim 21, further comprising a user list server ~~adapted to maintain~~ for maintaining various lists of users defined for clients of the client access network, ~~wherein the user list server is adapted to provide~~ and for providing a predetermined list as a basis for the selected set of users.